What is claimed is:

1. A dosage form for the oral administration of a methylphenidate drug, comprising two groups of particles, each containing said drug, wherein:

   a) said first group of particles provides a substantially immediate dose of said drug upon ingestion by a mammal, and

   b) said second group of particles comprises coated particles, said coated particles comprising from about 2% to about 75% by weight of said drug in admixture with one or more binders, said coating comprising a pharmaceutically acceptable ammonio methacrylate in a quantity sufficient to provide a dose of said medication delayed by from about 2 hours to about 7 hours following said ingestion.

2. The dosage form of claim 1 wherein said first group of particles comprises a pharmaceutically acceptable salt of methylphenidate in powder form.

3. The dosage form of claim 1 wherein said second group of particles comprises coated particles comprising a pharmaceutically acceptable salt of methylphenidate.

4. The dosage form of claim 2 wherein the amount of said pharmaceutically acceptable salt of methylphenidate in said first group of particles is from about 2% to about 99% by weight, based on the weight of said particles.

5. The dosage form of claim 4 wherein said pharmaceutically acceptable salt of methylphenidate comprises *dl-threo* methylphenidate hydrochloride.

6. The dosage form of claim 3 wherein said pharmaceutically acceptable salt of methylphenidate comprises *dl-threo* methylphenidate hydrochloride.

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7. The dosage form of claim 1 wherein said second group of particles comprises from about 20 % by weight to about 50% by weight of filler, based on the total weight of the copolymer.

8. The dosage form of claim 7 wherein said filler is selected from the group consisting of talc, colloidal silica, fumed silica, gypsum, and glycerine monostearate.

9. The dosage form of claim 8 wherein said filler is talc.

10. The dosage form of claim 9 wherein the amount of talc is from about 35 % to about 45% by weight, based on the total weight of the copolymer.

11. The dosage form of claim 10 wherein the amount of talc is from about 38% to about 42% by weight, based on the total weight of the copolymer.

12. The dosage form of claim 11 wherein the amount of talc is about 40% by weight, based on the total weight of the copolymer.

13. The dosage form of claim 1 wherein the ammonio methacrylate copolymer comprises acrylic groups and quaternary ammonium groups in a ratio of from about 10:1 to about 50:1.

14. The dosage form of claim 13 wherein said ratio is from about 15:1 to about 45:1.

15. The dosage form of claim 14 wherein said ratio is from about 15:1 to about 20:1.

16. The dosage form of claim 15 wherein said ratio is from about 30:1 to about 40:1.

17. The dosage form of claim 1 comprising a first ammonio methacrylate copolymer comprising, as polymerized units, acrylic groups and trimethylammonioethyl

methacrylate in a ratio of from about 30:1 to about 40:1, and a second ammonio methacrylate copolymer comprising, as polymerized units, acrylic groups and trimethylammonioethyl methacrylate in a ratio of from about 15:1 to about 20:1

18. The dosage form of claim 17 wherein the ratio of said first copolymer to said second copolymer is from about 90:10 to about 99:1.

19. The dosage form of claim 18 wherein the ratio of said first copolymer to said second copolymer is from about 93:7 to about 97:3.

20. The dosage form of claim 19 wherein the ratio of said first copolymer to said second copolymer is about 95:5.

21. The dosage form of claim 1 wherein said delay is from about 3 hours to about 6 hours.

22. The dosage form of claim 1 wherein said delay is from about 4 hours to about 5 hours.

23. A dosage form for once-daily oral administration of a methylphenidate drug comprising:

a) particles comprising from about 2% by weight to about 99% by weight of said methylphenidate drug, in admixture with one or more binders,

b) a coating exterior to said methylphenidate drug, comprising an ammonio methacrylate copolymer in a quantity sufficient to provide a dose of said methylphenidate delayed by from about 2 hours to about 7 hours following administration, and

c) on the exterior surface of said coating, a layer comprising said methylphenidate drug, to provide a substantially immediate dose of said methylphenidate upon administration.

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24. The dosage form of claim 23 wherein said methylphenidate is *dl-threo*-methylphenidate hydrochloride.

25. The dosage form of claim 23 wherein said methylphenidate is *d-threo*-methylphenidate hydrochloride.

26. The dosage form of claim 23 wherein said coating comprises a first ammonio methacrylate copolymer comprising, as polymerized units, acrylic groups and trimethylammonioethyl methacrylate in a ratio of from about 30:1 to about 40:1, and a second ammonio methacrylate copolymer comprising, as polymerized units, acrylic groups and trimethylammonioethyl methacrylate in a ratio of from about 15:1 to about 20:1.

27. A dosage form for the oral administration of *d-threo*-methylphenidate hydrochloride comprising two groups of particles, each containing *d-threo*-methylphenidate, wherein:

a) said first group of particles comprises *d-threo*-methylphenidate hydrochloride and provides a substantially immediate dose of said *d-threo* methylphenidate upon ingestion by a mammal, and

b) said second group of particles comprises coated particles, said coated particles comprising from about 2% to about 75% by weight of *d-threo*-methylphenidate hydrochloride in admixture with one or more binders, said coating comprising a pharmaceutically acceptable ammonio methacrylate copolymer in an amount sufficient to provide a dose of said *d-threo*-methylphenidate delayed by from about 2 hours to about 7 hours following said ingestion.

28. A method for treating disease in a patient in need of treatment comprising administering to the patient a dosage form providing once-daily oral administration of

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d-threo-methylphenidate hydrochloride, said dosage form comprising two groups of particles, each containing *d-threo*-methylphenidate, wherein:

a) said first group of particles comprises from about 2% to about 99% by weight of *d-threo*-methylphenidate hydrochloride and provides a substantially immediate dose of said *d-threo* methylphenidate upon ingestion by a mammal; and

b) said second group of particles comprises coated particles, said coated particles comprising from about 2% to about 75% by weight of *d-threo*-methylphenidate in admixture with one or more binders, and a coating consisting of an ammonio methacrylate copolymer in an amount sufficient to provide a dose of said *d-threo*-methylphenidate hydrochloride delayed by from about 4 hours to about 7 hours following said ingestion.

29. A dosage form of a pharmaceutically acceptable salt of *d-threo*-methylphenidate providing an *in vitro* release profile comprising two pulses of drug release, wherein said pulses are temporally separated by from about 2 hours to about 7 hours.

30. A dosage form of a pharmaceutically acceptable salt of *d-threo*-methylphenidate providing an *in vivo* plasma concentration of said *d-threo*-methylphenidate comprising two maxima, wherein said maxima are temporally separated by from about 2 hours to about 7 hours, and wherein the magnitude of said maxima differ by no more than about 30 percent.

31. A dosage form according to claim 23 wherein said ammonio methacrylate copolymer comprises a first copolymer of methyl methacrylate, ethyl acrylate and TAMCl in a ratio of 2:1:0.1 and a second copolymer of methyl methacrylate, ethyl acrylate, and TAMCl in a ratio of 2:1:0.2.